



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,735	10/31/2003	Ravinder Prakash	CHA920030024US1	3130

23550 7590 05/30/2007
HOFFMAN WARNICK & D'ALESSANDRO, LLC
75 STATE STREET
14TH FLOOR
ALBANY, NY 12207

EXAMINER

KRASNIC, BERNARD

ART UNIT	PAPER NUMBER
----------	--------------

2624

MAIL DATE	DELIVERY MODE
-----------	---------------

05/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,735

Applicant(s)

PRAKASH ET AL.

Examiner

Bernard Krasnic

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The amendment filed 3/28/2007 have been entered and made of record.

2. In response to the amendments filed on 3/28/2007:

The "Objections to the abstract and specification" have been entered and therefore the Examiner withdraws the objections.

The "Objections to the claims" have been entered and therefore the Examiner withdraws the objections to the claims.

3. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection by the Applicant's amendments toward independent claims 1, 8, 16, and 20.

The Applicant alleges, "Applicant traverses the rejections of independent claims 1, 8, 16, 20 because ..." in pages 8-9 and "Moreover, as amended, Applicant provides for ..." in page 9, and states respectively that Tyburski does not teach or disclose the amended limitations of "a position collection system for collectively storing postional data for each of a plurality of characters" and "a character position synchronization system that utilizes the positional data stored for the plurality of characters to positionally synchronizing corresponding characters". Further, the Applicant states respectively that Tyburski doesn't teach or disclose collectively storing positional data for a plurality of characters but rather stores magnetic or optical character information

for a single character at a time, and the Applicant also states respectively that Tyburski doesn't use the stored positional data for the plurality of characters to positionally synchronize the characters but rather uses timing information associated with movement of the entire document.

Firstly the Examiner agrees that the Tyburski stores character information using MICR and OCR systems, but disagrees that it is only limited to a single character at a time. Tyburski clearly states that a character recognition system and method can recognize a set or group of characters, not only a single character at a time (see Tyburski, col. 2, lines 20-24, col. 4, lines 55-58, Fig 3, reference numbers 24 and 22, Tyburski's system recognizes the account field 24 which is shown as "786" or the amount field 22 which is shown as "000000" as a set or group which is essentially plurality of characters being stored collectively [the group of characters are considered collectively], also Tyburski's system recognizes the unique field identification character 26 as a single character which is essentially being stored alone, therefore Tyburski's system may recognize a plurality of character information collectively or a single character information). The Examiner is aware that this character information is not the positional information, however the Examiner believes that Tyburski discloses this positional information silently when he infers that the "same" character is considered from both the MICR and the OCR. Tyburski uses the time delay as a means to wait for the positions to align and this waiting would need some type of positional data for the character to allow an accurate delay to be established. Even though the Examiner believes this limitation is an inherent feature, the reference Ott is used in a 35 U.S.C.

Art Unit: 2624

103 rejection to teach that the positional data of the character (X, Y coordinates on the document) is used to further enhance Tyburski's synchronization of the characters so that the MICR and OCR character recognitions could be better compared and verified.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tyburski's system [system of recognizing either a single or a plurality of characters from a check document and synchronizing the corresponding characters so a correlation between these corresponding MICR and OCR characters may result in a decision of a best match] using Ott's teachings by including the storing of each character of a check document with its corresponding positional XY coordinate data to Tyburski's position collection system and character position synchronization system in order to further enhance the verification of legibility of a check document (see Ott, col. 1, lines 7-12, col. 2, line 55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyburski et al (US 3,764,978) in view of Ott et al (US 5,754,674).

Re Claim 1: Tyburski discloses a character recognition system (see Fig. 1, abstract, lines 1-3), comprising at least one transducer / OCR (4) and MICR (2) system for

Art Unit: 2624

scanning printed character data and generating a plurality of sets / two sets (one for the OCR and one for the MICR) of transduced character information / output of OCR (4) and MICR (2) (see Fig. 1, abstract, lines 1-3, col. 2, lines 65-67, col. 1, lines 39-49, col. 3, lines 51-52); a position collection system / character recognition circuitry for collectively storing / computer buffer circuitry positional data / character information for each of a plurality of characters / group of characters (22, 24) in each set / two sets (one for the OCR and one for the MICR) of transduced character information (see Figs. 1 and 3, abstract, lines 1-3, col. 2, lines 20-24, col. 3, lines 41-55, col. 4, lines 55-58, the teachings "can recognize a group of characters" shows Tyburski's system recognizes the account field 24 which is shown as "786" or the amount field 22 which is shown as "000000" as a set or group which is essentially plurality of characters being stored collectively using the computer buffers or the character recognition circuitry [the group of characters are considered collectively], this character information is not the positional information, however Tyburski discloses this positional information silently when he explains that the "same" character is considered from both the MICR and the OCR); a character position synchronization system / synchronization circuitry that utilizes the positional data / character information stored / computer buffer circuitry for the plurality of characters / group of characters to positionally synchronizing corresponding characters / synchronize same characters from different sets / two sets OCR and MICR of transduced character information (see Fig. 1, col. 3, lines 51-64, Tyburski uses the character information including the time delay for the synchronization circuitry as a means to wait for the positions of the characters to align in order to establish a

comparison between the "same" characters); and a voting engine / minicomputer for receiving the positionally synchronized sets of transduced character information (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match).

However, Tyburski fails to specifically disclose or fairly suggest that the positional data is stored and used for character synchronization.

Ott discloses storing / memory the positional data / character XY coordinate on the check (see Ott, col. 1, lines 7-12, col. 2, line 55, col. 6, lines 52-54, col. 7, lines 41-47, col. 8, lines 1-4) and using the stored data for character synchronization (Tyburski teaches synchronization).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tyburski's system [system of recognizing either a single or a plurality of characters from a check document and synchronizing the corresponding characters so a correlation between these corresponding MICR and OCR characters may result in a decision of a best match] using Ott's teachings by including the storing of each character's corresponding positional XY coordinate data to Tyburski's position collection system and character position synchronization system in order to further enhance the verification of legibility of characters of a check document (see Ott, col. 1, lines 7-12, col. 2, line 55).

As to claim 8, the claim is the corresponding broader apparatus claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

As to claim 16, the claim is the corresponding method claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

As to claim 20, the claim is the corresponding means plus function claim to claim 1 respectively. The discussions are addressed with regard to claim 1.

The limitations, as recited in claim 20, "means for collectively storing" in line 3, and "means for positionally synchronizing" in line 5, invoke 35 USC 112, 6th paragraph.

Re Claim 2: Tyburski further discloses an optical character recognition (OCR) (4) transducer and a magnetic ink character recognition (MICR) (2) transducer (see Fig. 1, Abstract, lines 1-3).

Re Claim 3: Ott further discloses at least one transducer system (taught by Tyburski above) generates a plurality of sets (taught by Tyburski above) of transduced character information based on different gray-scale level settings / normal sensitivity and higher sensitivity (see Abstract, lines 1-4, col. 2, lines 60-68, col. 5, lines 14-19 and lines 43-44).

Re Claim 4: Ott further discloses the position information system (taught by the Tyburski and Ott combination above) generates a position collection for each character (taught by the Tyburski and Ott combination above) in the at least one set of transduced

Art Unit: 2624

character information, wherein each position / X-Y coordinate measurement provides a distance from the character to a predetermined location on a document containing the printed character data (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, line 4, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge of a document to the pixel being considered).

Re Claim 5: Ott further discloses the predetermined location includes an edge of the document (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, line 4, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge of a document to the pixel being considered).

Re Claim 6: Ott further discloses each position measurement provides a distance from a middle point of the character to the predetermined location (see Abstract, lines 6-10, col. 7, lines 36-39, col. 8, lines 4-18, X-Y coordinate is based on seed-pixel or object or character location on an image and pixel locations tell the distance from the top left edge of a document to the pixel being considered which could be the middle point of the object or character).

Re Claims 7: Tyburski further discloses the character position synchronization system / synchronization circuit (6) determines if characters from different sets of transduced characters / OCR and MICR correspond to each other by matching / minicomputer the

Art Unit: 2624

position measurement of the characters in different sets, within a predetermined tolerance (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match; the predetermined tolerance limitation is silent but a matching between two signals could only be done by some type of parameters which consider tolerance).

Re Claim 9: Tyburski further discloses at least one transducer system / OCR (4) and MICR (2) for scanning printed character data and generating the corresponding sets / two sets (one for the OCR and one for the MICR) of transduced character information / output of OCR (4) and MICR (2) (see Fig. 1, Abstract, lines 1-3, col. 2, lines 65-67, col. 1, lines 39-49, col. 3, lines 51-52).

As to claim 10, the discussions are addressed with respect to claim 3.

Re Claim 11: Tyburski further discloses a voting engine / minicomputer for processing the corresponding sets / corresponding recognition signals (17, 18, 12a) of transduced character information (see col. 4, lines 16-22, col. 1, lines 39-49, the minicomputer using the synchronized recognition signals from the OCR and the MICR, correlates the two signals and decides a best match).

As to claims 12-15, the discussions are addressed with respect to claims 4-7.

As to claims 17-18 and 19, the discussions are addressed with respect to claims 4-5 and 7.

As to claims 21 and 22, the discussions are addressed with respect to claims 4 and 7.

The limitation, as recited in claim 22 "means for positionally synchronizing" in line 1, invokes 35 USC 112, 6th paragraph.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Milford discloses a document character recognition system for identifying magnetic ink characters on bank checks and the like; Billester discloses a method for improving the accuracy of character recognition processes; Jasinski discloses a method and apparatus for transmitting and receiving encoded data; Rabinow disclose a document stacker and/or sorter; Takiguchi et al discloses a magnetic ink character reading apparatus and magnetic ink character reading method.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2624

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/698,735

Page 12

Art Unit: 2624

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bernard Krasnic
May 23, 2007



JINGGE WU
SUPERVISORY PATENT EXAMINER